

GAO

Report to the Chairman, Subcommittee  
on Aviation, Committee on Public  
Works and Transportation, House of  
Representatives

April 1991

# AIRLINE COMPETITION

## Weak Financial Structure Threatens Competition



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**Resources, Community, and  
Economic Development Division**

B-242812

April 15, 1991

The Honorable James L. Oberstar  
Chairman, Subcommittee on Aviation  
Committee on Public Works and  
Transportation  
House of Representatives

Dear Mr. Chairman:

The recent deterioration of the airline industry's financial health has raised concern that, as carriers are increasingly forced out of the industry, competition will decline and prices will rise. This deterioration could undermine the gains achieved for airline passengers since deregulation. In response to your request, this report focuses on the financial condition of the airline industry. It outlines some of the causes of financial distress and discusses some of the policy options that have been proposed to reverse this trend and promote competition.

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**Results in Brief**

Over the past decade, several large airlines have developed serious problems that weaken their financial position. Chief among these problems are the high levels of debt some carriers have incurred and the operating and marketing practices some carriers have adopted that prevent other carriers from competing effectively. More recently, the industry was also hit by three severe short-term problems: the ongoing recession, the higher fuel prices resulting from the Iraqi invasion of Kuwait, and the reduction in demand resulting from the threat of terrorism. These short-term problems have exacerbated the financial weakness that has been building up over the past decade.

The financial strain on airlines will be increased by regulatory and legislative requirements for carriers to replace and renovate older aircraft. Such repairs and modifications are needed to reduce noise and ensure safety. However, our initial estimate is that the safety requirements will cost the industry at least \$1 billion over the next 4 years.<sup>1</sup> Moreover, the recently enacted Airport Noise and Capacity Act of 1990 requires that all aircraft meet the more stringent stage 3 noise standards by the year 2000. We estimated last September that this will cost the industry \$2.2 billion.

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<sup>1</sup>See our report Aircraft Maintenance: Potential Shortage in National Aircraft Repair Capacity (GAO/RCED-91-14, Oct. 31, 1990). This was an interim report on an ongoing project. We expect the final report to be issued later this year.

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Existing financial problems have already pushed two jet carriers out of business and threaten the survival of several others. Eastern and Braniff have ceased operations within the past 2 years, and other airlines could fail if their financial condition does not improve. Competition could be reduced if several carriers cease operations. Even the loss of a single airline could, in some instances, significantly reduce competition, because numerous routes are served by only two or three carriers. These problems lend greater urgency to the need for further action to enhance the industry's competitive balance.

Certain policy options, such as improving carriers' access to airports and reducing barriers resulting from marketing practices, could help relieve some of the competitive problems facing the industry and also enhance the financial health of some of the weaker carriers. Notwithstanding efforts to improve the competitive environment, if airlines continue to carry excessive debt, they will continue to find it difficult to earn a profit and compete effectively. If some carriers do cease operations, close monitoring of the sales of their assets by the Department of Transportation (DOT) and the Department of Justice can help mitigate some of the loss of competition. Other options either run counter to the intentions of deregulation or will require more analysis before they can be considered for implementation. These options include reregulating fares and routes and allowing an increased level of foreign investment in U.S. carriers.

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### **High Debt Levels and Obstacles to Competition Have Weakened the Financial Health of Some Carriers**

The financial condition of several carriers has been weakened over the past decade by high debt levels and the high costs of overcoming operating and marketing practices that limit competition. Debt levels increased partly due to leveraged buyouts and partly to finance expansion. Airline operating and marketing practices have limited competitors' access to airports and have reduced the ability of some competitors to market their services. These practices have served to limit competition in certain markets. Finally, the current recession and higher fuel prices have placed additional stress on the industry.

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### **Debt Levels Have Increased Substantially for Some Carriers**

Debt levels increased substantially for some carriers during the 1980s, either as a result of leveraged buyouts or to finance expansion. This debt was taken on under the assumption that the demand for airline travel would grow at a sufficiently steady pace to generate the revenues to service the debt. This assumption is now proving to have been overly

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optimistic. The increase in debt increases fixed charges for interest payments and makes highly leveraged carriers much more vulnerable either to a short-run decrease in demand due to a recession or to a short-run increase in costs.

One common measure of debt levels is long-term debt as a percentage of total capitalization. Between 1980 and 1989, this measure rose from 62 percent to 273 percent at Pan Am, from 62 percent to 115 percent at TWA, and from 62 percent to 96 percent at Continental. (See app. I.) The debt to capitalization ratio at Eastern rose from 79 percent in 1980 to 473 percent in 1988.<sup>2</sup> America West raised its debt level from 45 percent to 85 percent between 1983 and 1989, while Midway's went up from 52 percent to 78 percent.<sup>3</sup> In contrast, despite a vigorous expansion program, American Airlines actually reduced its debt ratio during this period from 63 percent to 34 percent, while United, USAir, Southwest, Delta, and Northwest all held their debt ratios under 60 percent.

These data include capitalized leases (that is, leases for the full economic life of the asset), but may not include other long-term debt. Some analysts believe all long-term leases, as well as short-term leases, should be included as part of debt, which would make these debt ratios higher. One estimate for American and United places their debt ratios at 70 percent and 75 percent, respectively, including long-term leases and short-term debt.

As profits have declined, carriers have been less able to service their debt. Earnings before interest and taxes in the third quarter of 1990 were less than interest charges for 6 of the 11 major carriers (America West, Continental, Delta, Eastern, Pan Am, and USAir), and almost certainly declined further in the fourth quarter.

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<sup>2</sup>Because of Eastern's bankruptcy, 1989 data for Eastern are not comparable to the 1989 data for other airlines.

<sup>3</sup>America West is a relatively new airline that only began reporting in 1983. Midway began reporting in 1982.

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## Industry Operating and Marketing Practices Limit Competition

At the same time, as we have reported previously, some operating and marketing practices used in the airline industry limit competition and make it more difficult for some carriers to compete.<sup>4</sup> These practices limit access to airports and limit the ability of new carriers on a route to market their services.

### Some Practices Limit Access to Airports

Airport access is limited by the practice of leasing airport gates and other facilities to airlines on long-term exclusive-use leases. These leases give control of these facilities to airlines and make it possible for them to exclude other airlines from using the facilities. At some airports, most of the gates and passenger waiting rooms at the airport are controlled by a single airline.

Another practice that limits access to airports is the majority-in-interest clause. This provision in the airport use agreement typically gives the airlines providing a majority of the operations at an airport the right to disapprove capacity expansion projects that would alter the airlines' financial commitment to the airport. Thus, these clauses have the potential to delay or prevent capacity expansions that could accommodate another carrier. Our analysis showed that carriers charge significantly higher fares on routes to airports where a single carrier controls a large portion of the gates or where a majority-in-interest clause is in effect.

Last fall, the Congress passed legislation authorizing airports to levy passenger facility charges. These charges, by giving the airports a source of revenues independent of the airlines, should help the airports to expand capacity without seeking the airlines' approval.

Another factor limiting airport access is the Federal Aviation Administration's (FAA) High Density Rule, which restricts access to takeoff and landing "slots" at National Airport in Washington, LaGuardia Airport and JFK Airport in New York, and O'Hare Airport in Chicago. Our analysis showed that carriers charge higher fares on routes where slot controls are in effect. While these practices enhance the revenues of carriers that have established positions at these airports, they can make it more difficult for other carriers to compete and earn an adequate profit.

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<sup>4</sup>Airline Competition: Industry Operating and Marketing Practices Limit Market Entry (GAO/RCED-90-147, Aug. 29, 1990). In this report, operating practices include limited access to airport gates, access to slot reservations, and local noise restrictions, which limit access to airports.

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## Marketing Practices Limit the Ability of Airlines Entering New Markets to Compete

Airline marketing practices also limit competition. One such practice, about which we testified in 1988, is the use of airline-owned computerized reservation systems (CRS).<sup>5</sup> Because each carrier must, as a practical matter, have its flights listed on each of the four CRSS in order to market its flights successfully, each carrier must pay the booking fees charged by the other airlines that own the CRSS. These booking fees far exceed the costs of providing the service and hence transfer hundreds of millions of dollars in revenues from carriers that do not own CRSS to those that do. Even a carrier that owns a CRS loses money if it pays out more in booking fees for flights booked on other systems than it receives from other carriers' flights booked on its system. Because of restrictive contract provisions between CRS vendors and travel agents, it is virtually impossible for a new CRS to be established or for a small CRS to expand its market share. While most of the major carriers are now part-owners in CRSS, most of the benefits of these systems go to the two majority owners of the two dominant systems, American and United. We calculated that the lack of effective competition in the CRS industry allows the CRSS controlled by American and United each to receive over \$300 million per year, in excess of the costs of the service provided (including a reasonable profit), from other carriers in the industry, most of which are financially weaker.<sup>6</sup>

Frequent flyer plans may also have a significant effect in reinforcing the market power of dominant carriers. Our survey of travel agents indicated that business flyers often choose a carrier on the basis of frequent flyer plans, which generally favor the larger carriers in each market. Travel agent commission overrides (bonus commissions paid to travel agents to encourage booking on a particular carrier) may also restrict competition, but their effect is less clear.

Code-sharing agreements (cooperative marketing agreements generally between jet carriers and commuter carriers) appear to strengthen the position of jet carriers with such agreements, especially at the carriers' hubs. In doing so, these agreements could prevent other carriers from competing effectively. Code-sharing agreements might also reduce the long-run competitiveness of the industry by making commuter carriers less independent and preventing them from potentially offering a competitive challenge to larger carriers in some markets.

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<sup>5</sup>Competition in the Airline Computerized Reservation System Industry (GAO/T-RCED-88-62, Sept. 14, 1988).

<sup>6</sup>These estimates were made using 1986 data. More recent data were not available.

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## The Recession, High Fuel Prices, and Fears of Terrorism Have Worsened Carriers' Financial Problems

The airline industry's profitability has generally been low over the last decade. The industry lost money in 4 out of the 10 years from 1980 to 1989. Passenger airlines earned a profit of \$1.2 billion in 1988 but suffered heavy losses in the recent economic downturn.<sup>7</sup> They lost \$20.7 million in 1989, and they are estimated to have lost a record \$2 billion in 1990. (See app. II.) The recent decline in profitability is due primarily to a cyclical decline in the health of the economy, the rise in the price of fuel, and the perceived threat of terrorism resulting from the Persian Gulf war. In addition, the Secretary of Transportation has raised as an issue the role of labor costs in the financial health of the industry. We have not reviewed this issue and are unable to say what role labor costs play in the industry's financial health.

The demand for airline service tends to rise and fall with the overall level of national income. Gross national income grew very slowly in 1990, rising 1.0 percent during the first three quarters before dropping 0.5 percent in the fourth quarter. Meanwhile, domestic airline industry capacity in 1990 grew faster than demand, rising by 5.5 percent over 1989 capacity. Fares rose slightly but less than the increase in operating costs.

The monthly average domestic cost of jet fuel rose 97 percent during the first months of the Persian Gulf crisis, from \$0.56 per gallon in July 1990 to a peak of \$1.11 in October 1990. Our analysis indicates that the increase in fuel costs over those months pushed up total operating costs by at least 10 percent. By March 5, 1991, the price of fuel had fallen below the July 1990 price, a decline of 52 percent from the October 1990 peak. While there is no organized futures market for jet fuel, future prices in early March for other refined petroleum products suggested that prices were expected to fall further over the course of the year.

Finally, many passengers have significantly reduced their air travel or have stopped flying altogether. Consequently, several carriers have been forced to either cancel or reduce service on several Middle Eastern and North Atlantic routes.

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<sup>7</sup>Our analysis includes the 11 major airlines, those with revenues of more than \$1 billion a year, and Midway.

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## Future Investment Demands Will Impose Further Financial Strains on the Industry

Investment demands for replacing and renovating aircraft will continue to be heavy due to increasingly stringent FAA airworthiness directives and new federal requirements to phase out older, noisier jets. FAA recently issued new airworthiness directives for aging aircraft, requiring repairs and modifications to about 1,400 of the 4,100 aircraft in the U.S. fleet. Our preliminary estimate is that this could cost more than \$2 billion over the next 4 years. Moreover, the recently enacted Airport Noise and Capacity Act of 1990 requires that all large jet aircraft meet stringent stage 3 noise standards by the year 2000. We recently estimated that this will require the retrofitting or early replacement of over 2,000 aircraft over the next 10 years at a cost of about \$2.2 billion.<sup>8</sup> These changes are essential to meet compelling safety and noise abatement objectives, but they will place a substantial financial burden on the industry.

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## Financial Problems Threaten the Survival of Several Carriers

Several major carriers, including Pan Am, Continental, and TWA, have been plagued by high debt and low profits. Pan Am and Continental have both filed for protection from their creditors under Chapter 11 of the Bankruptcy Code. A smaller jet carrier, Midway, also recently filed Chapter 11 bankruptcy, and TWA recently defaulted on some of its obligations. America West made a profit in 1989 but lost money in 1990, and it is also carrying a high debt level. USAir has a low debt level but lost money in both 1989 and 1990. These carriers are all, to varying degrees, threatened by the declining financial fortunes of the industry. For the stronger carriers in the industry, on the other hand, the recent decline in profitability will probably cause temporary financial distress but should not lead to any long-term problems. American, Delta, Northwest, Southwest, and United all have comparatively low debt levels and turned a profit in 1989. The likelihood of any particular carrier's survival depends on the strength of various elements of the carrier's balance sheet, its ability to compete effectively and to hold on to key markets, the level of fuel costs, and the length of the recession. A carrier's balance sheet evolves continuously as the carrier takes out additional loans and acquires new assets. We have not assessed the prospects of survival of any particular carriers, but clearly several carriers are threatened.

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<sup>8</sup>See our testimony, Aviation Noise: A National Policy is Needed (GAO/T-RCED-90-112, Sept. 27, 1990).

## Competition Could Be Harmed If Additional Carriers Cease Operations

If additional carriers cease operations, the decline in the number of competing carriers will probably harm competition. The four major carriers in the weakest financial condition (including Eastern) collectively carried about 27 percent of the industry's traffic last year. (Market shares of the major carriers are shown in app. III.) Our analysis of industry pricing demonstrates that carriers are able to charge higher prices on routes where they have higher market shares. Our analysis indicates that doubling a carrier's market share on a route, for example, from 10 percent to 20 percent, is associated on average with an increase in prices of almost 9 percent. As carriers cease operations, we would expect the market shares and fares of the remaining carriers to rise.

The loss of any of these major carriers, with the possible exception of Pan Am, will affect a substantial number of routes. Before it ceased operations, Eastern had at least a 10-percent market share on 10 percent of the nation's routes.<sup>9</sup> Continental and TWA had such shares on 14 percent and 12 percent of the nation's routes, respectively. Pan Am, by contrast, is primarily an international carrier and had at least a 10-percent share on less than 1 percent of the nation's domestic routes.

It has been suggested that the survival of four or five carriers would be enough to achieve effective competition. This would be true if several carriers served most routes. However, 76 percent of all passengers nationwide fly on routes served by three or fewer carriers, and 45 percent fly on routes served by only one or two carriers.<sup>10</sup> On these routes, the loss of a single carrier could have a serious adverse effect on competition.

The nature of the competitive outcome would depend, of course, on how other carriers responded to the failing carrier's exit. If a failing carrier were able to sell its hub operation to another carrier that did not already provide service on the failing carrier's routes, then competition might not be adversely affected. However, the acquiring carrier would probably already be providing service on some of the acquired routes, and competition would be adversely affected on those routes. The ultimate outcome is uncertain, but the potential loss of competition could significantly raise fares.

<sup>9</sup>Our analysis was based on the 1-year period running from the third quarter of 1989 through the second quarter of 1990.

<sup>10</sup>Secretary's Task Force on Competition in the U.S. Domestic Airline Industry: Industry and Route Structure, Volume I (U.S. Department of Transportation, Office of the Secretary of Transportation, Feb. 1990), p. 133. Estimates based on data for year ending September 1988.

The loss of competition when a carrier ceases operations can be reduced if DOT and Justice monitor sales by the failing carrier of its geographically fixed assets, such as gates and slots, to ensure that these sales do not result in avoidable losses of competition. In the past, when mergers were assumed to have no impact because of the role of "potential competition," DOT's review of competitive impacts was sometimes cursory.<sup>11</sup> DOT and Justice are currently monitoring asset sales by Eastern Air Lines, and Justice recently challenged the proposed sale of Eastern's assets. Justice opposed the transfer of Eastern's gates and slots to United Airlines at Washington National Airport on the grounds that the acquisition of those assets by United, which is the dominant carrier at nearby Dulles Airport, would result in excessive market dominance for that carrier in the Washington metropolitan area. Those assets have instead been sold to Northwest Airlines. The sale of Eastern's gates in Atlanta to Delta Air Lines, which already dominates routes from Atlanta, could have an effect on competition in the Atlanta market, where fares since deregulation have already increased more on average than in any other major hub market.<sup>12</sup> However, Justice declined to oppose the sale of those assets in the belief that sufficient access to gates remains for other carriers, and that no other purchase offers are forthcoming.

## Policy Initiatives to Promote Competition Should Also Promote Financial Health

The declining financial health of several carriers has led to numerous suggestions for policy initiatives to improve their financial condition. Some of the suggestions deal with the short-term problems of the industry. These suggestions include forcing down the price of jet fuel, either through pressure by the federal government on oil companies or through release of petroleum from the Strategic Petroleum Reserve, and allowing airlines to retain for a time the revenues from the airline ticket tax. Other suggestions are addressed to the long-term problems of the industry, such as proposals to set a floor on airline fares so as to increase revenues and to ease the rules that restrict investments by foreign entities in U.S. carriers.

We believe these approaches would generally be either ineffective or inappropriate ways of enhancing the financial health of the industry. A

<sup>11</sup>See our report, Airline Competition: DOT's Implementation of Airline Regulatory Authority (GAO/RCED-89-93, June 28, 1989).

<sup>12</sup>See our reports, Airline Competition: DOT and Justice Oversight of Eastern Air Lines' Bankruptcy (GAO/RCED-90-79, Feb. 23, 1990) and Airline Deregulation: Trends in Airfares at Airports in Small and Medium-Sized Communities (GAO/RCED-91-13, Nov. 8, 1990).

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more appropriate approach would be to focus on long-term policies to enhance competition—such as revising rules on slot allocation and computerized reservation systems—that we have discussed in previous reports and testimony. This approach could both enhance the financial condition of some of the threatened carriers and mitigate any reduction in competition that would occur if additional carriers ceased operations. To be effective, these policies should be structured so that new entry is a viable option.

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### Short-Term Policy Approaches

Reducing the price of jet fuel would not solve the fundamental problems affecting the airline industry. The price of jet fuel has already fallen considerably from the peak levels reached this fall, and prices of petroleum products are expected to fall further this year. In any case, reducing fuel prices would not solve the more fundamental problems, such as limited access to airports and restrictive marketing practices, that limit the competitiveness of the airline industry.

Retaining revenue from the airline ticket tax is inconsistent with the purposes of airline deregulation. Airlines collect a 10-percent excise tax on the price of airline tickets, which they remit to the federal government for deposit in the Airport and Airway Trust Fund. Allowing airlines to retain or delay remitting revenues from the airline ticket tax would be an indirect form of federal financial assistance for the industry. The airlines would increase their cash flow and reduce their need to borrow, but these savings would come at the expense of the federal government, which would have to borrow more funds to replace the lost cash flow and thereby incur increased interest charges. Moreover, such financial assistance would be at odds with one of the purposes of the Airline Deregulation Act of 1978, to reduce the role of the federal government in the airline industry.

GAO has had extensive experience in analyzing previous bailouts, including those for Conrail, Lockheed, Chrysler, and New York City (the Comptroller General served on the boards that oversaw the financial assistance provided to Conrail and Chrysler). In a previous report, we reviewed the experience with these bailouts and set out a series of guidelines that should be followed before any additional such bailouts are authorized.<sup>13</sup> These guidelines are that the problem must be clearly identified, the national interest should be clearly established, the objectives of the bailout should be clear and consistent, and the government's

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<sup>13</sup>Guidelines for Rescuing Large Failing Firms and Municipalities (GAO/GGD-84-34, Mar. 29, 1984).

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financial interests should be protected. Given the dramatic increase in federal budget deficits since these other bailouts were authorized, it is especially important that any proposal for financial assistance to the airline industry (1) address the national interest to be served by rescuing any individual airline and (2) establish how such a bailout could be structured to protect the government's financial interests. Finally, and more fundamentally, other steps to enhance the competitiveness of the airline industry and open the industry to new entry should be taken before financial assistance is considered.

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## Long-Term Policy Approaches

### Reregulation of Fares Is Inconsistent With Fundamental Deregulation Policies

Reregulation of fares would reverse the pro-competitive policy established by the Congress in 1978, would be cumbersome to implement, and might well be ineffective in halting the slide in airlines' profits. Carriers with weak reputations for the quality of passenger service might be able to compete effectively only by offering lower fares than their competitors. Forcing carriers with lesser reputations to charge the same fares as their competitors might reduce their traffic levels and hasten their exit from the industry, rather than retard it. Reregulation of fares would also be extremely cumbersome administratively. Carriers vary the number of seats they sell at each fare level on each flight. A regulator would need either to regulate the number of seats sold at each fare level on each flight, which would be extremely cumbersome, or to reduce the airlines' freedom to vary their fares, which would probably reduce, rather than increase, their revenues. Given the current size of airline fleets, discount airfares are needed to fill the seats, and the airlines can much better assess the level of pricing that will maximize their revenues from that capacity than the federal government can. Eliminating discount seats would also exclude price-sensitive passengers who could not afford to fly at higher fares.

### Opening U.S. Airlines to More Foreign Investment Requires More Analysis

Improving access of poorly financed carriers to capital might reduce their cost of capital and enhance their ability to survive. One option for the Congress to consider would therefore be easing the rules that restrict investments by foreign entities in U.S. carriers. The Secretary of Transportation recently relaxed these rules so as to allow unlimited

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access to debt capital from foreign sources and access to nonvoting foreign equity capital up to 49 percent of an airline's total equity.<sup>14</sup> The 25-percent limit on voting foreign equity, which is fixed by statute, of course remains in effect.

The unlimited access to foreign debt capital is subject to the condition that the loan not provide special rights to the debt holder that might imply control. While the order does not specify what kinds of special rights are meant, the rights that have concerned DOT in the past include the foreign creditor's right to name members of a management advisory committee and its right to enter into exclusive marketing agreements with the U.S. carrier. We would also be concerned with what rights of recourse the foreign creditor would have in the event of default.

Increasing access to foreign capital significantly beyond what the Secretary has already announced could effectively give control of U.S. carriers to foreign entities. We would therefore urge caution in authorizing such access. If foreign carriers were allowed to buy effective control of U.S. carriers, this would in effect give these foreign carriers cabotage rights (i.e., the right to provide domestic service) in the United States. This would raise legitimate concerns. For example, foreign control of U.S. carriers might compromise their key national defense role. Under the Civil Reserve Air Fleet program, the airlines are required to make certain aircraft available for military airlift. Such airlift was a critical part of the mobilization for the Persian Gulf war. Also, allowing foreign control of U.S. carriers would complicate the bargaining strategy of the U.S. government in negotiating international route rights. Finally, many foreign carriers are government-owned and subsidized. Allowing such carriers to compete in the U.S. market could distort the competitive process.

The creation of a single market in Europe in 1992 is likely to lead to efforts to renegotiate bilateral agreements governing access by U.S. carriers to Europe. Any action to allow foreign ownership of U.S. carriers or access by foreign carriers to U.S. domestic markets needs to be part of a reciprocal arrangement that allows U.S. carriers greater access to foreign markets.

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<sup>14</sup>Debt capital represents funds supplied by a firm's creditors. Equity capital represents funds supplied by a firm's stockholders. Holders of voting equity capital have the right to participate in determining corporate policies and in electing directors.

## Improving Financial Health by Promoting Competition

The government's interest in the survival of threatened carriers is primarily one of ensuring that there are enough carriers to provide effective competition. At the same time, the goal of federal competition policy is to protect competition, not to protect specific competing firms. A policy that protects inefficient competitors (for example, through some kind of subsidy) could injure, not protect, competition. If only the weaker carriers were subsidized, the financial health of stronger carriers could be threatened; alternatively, if all carriers were subsidized, the overall cost of providing airline service, which competition is intended to minimize, could be increased. Ultimately, the only way to ensure the survival of enough firms to maintain competition is to ensure that the industry remains open to market entry. The government's interest is to ensure that a "level playing field" exists so that the weaker carriers still in business have the opportunity to compete effectively with the stronger carriers and so that new firms can attract the investment capital needed to enter the industry.

In previous reports and testimony, we have discussed several policies to promote competition that could also enhance the financial health of some of the weaker carriers.<sup>15</sup> Although some carriers might lose some control over their markets if these policies were implemented, we believe that the weaker carriers would, in general, gain and that the competitive balance of the industry would improve. The design and implementation of such policies should take into account the need to minimize adverse effects on financially threatened carriers.

## Improving Access to Airports Can Promote Competition

Our testimony and reports have focused on two policy objectives—easing access to airports and reducing the marketing advantages of dominant carriers. The recent passage of legislation authorizing passenger facility charges is one step toward easing access to airports. It should allow airports to expand their facilities without seeking approval from dominant airlines. An additional step in this direction would be to encourage the use of preferential-use leases (rather than exclusive-use leases) of airport facilities to airlines. Preferential-use leases allow carriers other than the primary lessee access to gates and other facilities when they are not needed by the primary carrier.

<sup>15</sup>For example, Barriers to Competition in the Airline Industry (GAO/T-RCED-89-66, Sept. 21, 1989) and Airline Competition: Industry Operating and Marketing Practices Limit Market Entry (GAO/RCED-90-147, Aug. 29, 1990).

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Revisions to the slot rule could increase opportunities for airlines to establish or expand service at the four airports where there are slot controls. Such revisions could enhance the competitive status of carriers like America West and Midwest Express that currently have very limited access to these airports. Other financially threatened carriers, however, such as Pan Am and TWA, could be injured if the financial value of their slots is substantially reduced. Revisions to the slot rule should be carefully designed to provide access by new competitors to slot-controlled airports without undermining the financial viability of threatened carriers. DOT has been considering revisions to the slot rule for over 2 years. Although a proposed rule has been drafted, the review process at the Office of Management and Budget may delay its issuance for a few months, so a final rule would not come out for at least several more months.

### Reducing Barriers Resulting From Marketing Practices

In our September 1989 testimony on CRSS, cited earlier, we presented ways of revising DOT's rules governing these systems to improve their competitive impact. Options to remedy the anticompetitive effects of CRSS include eliminating or restricting booking fees, establishing a common CRS governed by a consortium of airlines, and eliminating the minimum-use clauses and minimum 5-year terms from contracts between CRS vendors and travel agents. As with the slot rule, DOT considered revision of its CRS rules for more than a year; it has recently issued a proposed rule.

Frequent flyer plans also have a substantial potential to limit competition. Policies that would restrict these plans might enhance competition by strengthening the competitive position of the smaller or weaker carriers.

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## Conclusions

The financial distress of the airline industry threatens the survival of several carriers. An industry with four or five carriers might, as has been suggested, be effectively competitive if several carriers served most routes. However, given the barriers to market entry that exist, there is no assurance that new carriers would enter existing routes to replace carriers that ceased operations. Action is needed now to ensure that the structural conditions exist for effective competition in the airline industry. The need for action on this problem has been apparent for at least the past 2 years. The failing financial health of several carriers makes this need even more urgent. DOT has been considering new rulemakings on slots and CRSS for over a year, and even proposed rules still appear to be months away. Continued delay by DOT may result in

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these reforms taking effect so late that they will be less effective in preserving competition. Other actions to encourage use of preferential-use gate leases at airports and to restrict frequent flyer plans could also be considered. While opening the U.S. market to foreign competition might offer some hope for improved competition over the long term, such changes would be most appropriate in the context of a reciprocal agreement for improved access to foreign markets.

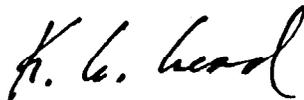
Deregulation of the airline industry has generally brought lower fares and better service to most Americans. However, benefits of deregulation could be lost if the industry collapses into a tight oligopoly, controlled by a handful of firms, into which new entry is effectively precluded. Even an improvement in the competitive environment within which the industry operates will be to no avail, however, if firms continue to burden themselves with excessive debt.

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This report draws from the work we have done over the past 3 years, much of which has appeared in a series of reports and testimonies on competition in the airline industry. (A list of related GAO products appears at the end of this report.) In assessing the financial condition of the industry, we also interviewed key officials and obtained data from DOT, the Air Transport Association, private securities analysts, and a variety of relevant periodicals.

We did not obtain official agency comments on this report. As arranged with your office, we will send copies of this report to the Secretary of Transportation and to other interested parties. We will also make copies available to others on request. If you have any questions about this report, I can be reached at (202) 275-1000. Major contributors to this report are listed in appendix IV.

Sincerely yours,



Kenneth M. Mead  
Director, Transportation Issues

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## Abbreviations

ATA	Air Transport Association
DOT	Department of Transportation
CRS	computerized reservation system
FAA	Federal Aviation Administration
GAO	General Accounting Office



# Long-Term Debt as a Percentage of Total Capitalization, 1980-89

Airline	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Pan Am Corp.	62.0	58.8	77.3	71.9	82.2	60.5	99.0	132.3	151.1	272.9
Eastern	78.5	83.8	89.0	93.2	87.6	84.0	90.7	97.3	473.3	(52.9) <sup>a</sup>
TWA <sup>b</sup>	61.8	66.6	70.3	65.4	66.7	75.5	94.2	89.8	101.3	114.8
Continental <sup>c</sup>	62.3	53.7	92.6	308.9	123.9	95.9	97.3	85.4	96.3	96.3
America West	•	•	•	44.7	75.7	65.9	81.5	89.0	86.9	84.5
Midway	•	•	57.2	52.0	62.3	44.1	34.9	50.8	46.5	78.0
UAL Corp.	45.2	48.2	58.3	41.5	31.1	56.7	45.8	32.7	62.7	46.1
Air Wisconsin	71.2	49.4	35.1	46.6	48.2	54.5	51.4	47.5	39.9	41.8
Alaska	•	•	39.9	40.0	48.2	54.0	56.6	39.5	32.7	37.1
AMR Corp.	63.4	66.4	64.2	51.2	47.2	43.7	45.1	45.0	41.0	33.5
USAir <sup>d</sup>	44.0	42.6	37.9	31.8	31.7	27.7	24.8	44.5	35.6	44.8
Southwest	38.0	22.2	27.2	29.6	25.7	40.3	35.3	29.5	35.6	33.4
Delta <sup>e</sup>	10.6	12.4	20.2	45.0	30.4	22.0	33.4	28.7	21.0	18.3
NWA, Inc. <sup>f</sup>	5.4	1.1	0.0	8.2	7.9	29.3	50.8	34.4	32.1	•
<b>Industry average<sup>g</sup></b>	<b>53.5</b>	<b>54.8</b>	<b>60.3</b>	<b>57.3</b>	<b>52.5</b>	<b>52.6</b>	<b>56.8</b>	<b>54.6</b>	<b>53.6</b>	<b>56.2</b>

Note: For years in which no data appear, data were not publicly available.

<sup>a</sup>Due to Eastern's bankruptcy, 1989 data for Eastern are not comparable to Eastern's earlier data or to other carriers' 1989 data.

<sup>b</sup>TWA's data for 1986 and subsequent years reflect the airline's acquisition of Ozark on September 15, 1986.

<sup>c</sup>For Continental, prior to December 31, 1986, \$653.9 million in liabilities was subject to Chapter 11 reorganization proceedings. Financial ratios and data for 1983, 1984, and 1985 do not include any of the liabilities subject to reorganization proceedings.

<sup>d</sup>USAir's data for 1987 and subsequent years reflect the airline's acquisition of Piedmont on November 5, 1987.

<sup>e</sup>Delta's data for 1987 and subsequent years reflect the airline's acquisition of Western on December 18, 1986.

<sup>f</sup>NWA, Inc., was acquired by Wings Acquisition, Inc., on August 4, 1989. Consequently, company reports for NWA, Inc., are not available for 1989. NWA's data for 1986 and subsequent years reflect the airline's acquisition of Republic on August 12, 1986.

<sup>g</sup>Industry average data include data for Ozark, People Express, Piedmont, Republic, and Western until their respective mergers.

Source: Salomon Brothers Stock Research, *The Financial Condition of the U.S. Airline Industry at Year-End 1989*, by Julius Maldutis, Ph.D., July 1990, Figure 10, p. 7. Data are drawn from company reports.

# Net Profit (Loss) By Airline

Dollars in millions

	Full year 1988 <sup>a</sup>	Full year 1989 <sup>a</sup>	First quarter 1990 <sup>b</sup>	Second quarter 1990 <sup>b</sup>	Third quarter 1990 <sup>b</sup>	Fourth quarter 1990 <sup>c</sup>
America West	9.4	20.0	(2.6)	6.1	(22.0)	(56.3)
American	449.4	423.1	(30.7)	120.0	54.1	(215.1)
Continental	(315.5)	3.1	21.3	96.8	(55.1)	•
Delta	344.5	473.2	31.3	74.1	(51.6)	(207.8)
Eastern	(335.4)	(852.3)	(136.5)	(35.6)	(252.8)	•
Midway	6.5	(21.7)	(22.9)	(11.4)	(18.7)	(86.1)
Northwest	162.8	355.2	(39.3)	59.6	90.7	(121.0)
Pan American	(118.3)	(414.7)	(184.7)	(46.9)	(25.8)	•
Southwest	57.4	71.4	5.1	23.5	23.0	(4.6)
Trans World	249.7	(298.5)	(143.0)	103.4	(14.7)	183.3
United	589.2	358.1	(35.7)	149.7	105.7	(123.5)
USAir	76.2	(137.7)	(66.9)	(24.7)	(111.1)	(221.1)
<b>Total</b>	<b>1,196.0</b>	<b>(20.7)</b>	<b>(604.6)</b>	<b>514.6</b>	<b>(278.3)</b>	<b>(1,035.5)</b>

Note: For airlines where no data is presented, 4th quarter data was not yet available when the report was finalized.

<sup>a</sup>Full year data on net income (loss) for 1988 and 1989 were provided by the Air Transport Association (ATA) for its member and associate airlines.

<sup>b</sup>Data on net income (loss) for the first three quarters of 1990 are from the Form 41 data filed with the Department of Transportation.

<sup>c</sup>Data on net income (loss) for the fourth quarter of 1990 are from preliminary results provided by ATA for its member and associate airlines. Where fourth quarter data are not given, they were not yet available when this report was finalized. Total shown is for airlines that have reported so far. ATA projects the total loss for the fourth quarter to be approximately \$1.7 billion and the total loss for 1990 to be at least \$2 billion.

# Major U.S. Airlines' Market Share, Calendar Year 1990

<b>Airline</b>	<b>Revenue passenger miles (thousands)</b>	<b>Market share (percent)</b>
American	76,998,599	17.467
United	75,945,637	17.228
Delta	58,983,900	13.380
Northwest	51,491,064	11.681
Continental	39,173,562	8.886
USAir	35,550,516	8.065
TWA	34,236,500	7.767
Pan American	30,676,000	6.959
Eastern	16,692,131	3.787
America West	11,114,444	2.521
Southwest	9,958,940	2.259

Source: Aviation Daily, Jan. 23, 1991, p. 149.

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